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US 20050185347 A1	20050825	Magnetoresistive element and magnetic memory device	360/324.2	257/E21.665; 257/E27.005	Inomata, Koichiro et al.
US 20050170218 A1	20050804	Magnetoresistive effect element, magnetic memory and magnetic head	428/828		Kishi, Tatsuya et al.
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US 20050152077 A1	20050714	Magnetoresistive device, magnetoresistive head and magnetic recording- reproducing apparatus	360/324.11	360/324.12; 365/158; 365/173	Yuasa, Hiromi et al.
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US 20050018478 A1	20050127	Magnetic random access memory device having thermal agitation property and high write efficiency	365/171		Nagase, Toshihiko et al.
US 20040257866 A1	20041223	Magnetic memory	365/171		Amano, Minoru et al.
US 20040246634 A1	20041209	Magnetoresistance effect element, magnetic head and magnetic reproducing apparatus	360/324.11	360/324.12	Yuasa, Hiromi et al.
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US 20040179393 A1	20040916	Magnetic random access memory and method of manufacturing the same	365/158		Yoda, Hiroaki et al.
US 20040175596 A1	20040909	Magnetoresistive element and magnetic memory device	428/811.2	257/E21.665; 257/E27.005; 360/324.2; 365/171; 428/812	Inomata, Koichiro et al.
US 20040169963 A1	20040902	Magnetoresistance effect element, its manufacturing method, magnetic reproducing element and magnetic memory	428/693.1		Okuno, Shiho et al.

US 20040169006 A1	20040902	Magnetoresistance effect element and method for producing same	216/27	257/E43.006	Hashimoto, Susumu et al.
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US 20040156232 A1	20040812	Magnetic memory	365/171		Saito, Yoshiaki et al.
US 20040156231 A1	20040812	Magnetic memory	365/158	257/E21.665; 257/E27.005	Saito, Yoshiaki et al.
US 20040152227 A1	20040805	MAGNETIC MEMORY DEVICE HAVING YOKE LAYER, AND MANUFACTURING METHOD	438/48		Yoda, Hiroaki et al.
US 20040141367 A1	20040722	Magneto-resistance effect element and magnetic memory	365/158		Amano, Minoru et al.
US 20040121185 A1	20040624	Magnetoresistance effect element, magnetic head, magnetic head assembly, magnetic storage system	428/815	324/252; 338/32R; 360/122; 428/816	Fukuzawa, Hideaki et al.
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US 20030227807 A1	20031211	Magnetic logic element and magnetic logic element array	365/202		Nakamura, Shiho et al.
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US 20030137870 A1	20030724	Magnetic memory	365/158	257/E21.665; 257/E27.005	Saito, Yoshiaki et al.
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US 20020159203 A1	20021031	Magnetoresistance effect element	360/324.2	365/158	Saito, Yoshiaki et al.
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US 6831855 B2	20041214	Magnetic memory	365/158	365/171	Kishi; Tatsuya et al.
US 6816347 B2	20041109	Magnetoresistive element and magnetic recording apparatus	360/324.11		Koi; Katsuhiko et al.
US 6807094 B2	20041019	Magnetic memory	365/173	365/158; 365/171	Saito; Yoshiaki et al.
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US 6784509 B2	20040831	Magnetoresistance effect element, magnetic head and magnetic reproducing apparatus	257/421	257/E27.006; 257/E43.005; 360/324.11	Yuasa; Hiromi et al.
US 6770210 B2	20040803	Magnetoresistance effect element and method for producing same	216/22	257/E43.006; 29/603.07	Hashimoto; Susumu et al.
US 6765824 B2	20040720	Magneto-resistance element capable of controlling the position and size of edge domain and the coercivity and magnetic memory	365/173	365/158; 365/171; 365/51	Kishi; Tatsuya et al.
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US 6757143 B2	20040629	Magnetoresistive effect element, its manufacturing method, magnetic head, magnetic reproducing	360/324.1	257/E21.665; 257/E27.005	Tunayama; Tomomi et al.

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US 6369992 B1	20020409	Yoke-type head with magneto-resistance effect film recessed from medium facing surface and extending across magnetic gap	360/321	360/324.1	Yoda; Hiroaki et al.
US 6368706 B1	20020409	Magnetoresistance effect element	428/332	257/E43.004; 324/252; 428/336; 428/810; 428/811.1; 428/900	Iwasaki; Hitoshi et al.
US 6348274 B1	20020219	Magnetoresistive element and magnetic recording apparatus	428/811	360/313; 428/815; 428/900	Kamiguchi; Yuzo et al.
US 6338899 B1	20020115	Magnetoresistance effect element, magnetic head,	360/324.12	324/252; 338/32R; 360/324.11;	Fukuzawa; Hideaki et al.

		magnetic head assembly, magnetic storage system		428/336; 428/811; 428/811.2; 428/900	
US 6307708 B1	20011023	Exchange coupling film having a plurality of local magnetic regions, magnetic sensor having the exchange coupling film, and magnetic head having the same	360/126	360/321	Yoda; Hiroaki et al.
US 6303218 B1	20011016	Multi-layered thin-film functional device and magnetoresistance effect element	428/332	360/313; 428/336; 428/811.2; 428/811.5; 428/816; 428/900	Kamiguchi; Yuzo et al.
US 6285531 B1	20010904	Magnetic head with magneto-resistance effect element disposed on opposite side of magnetic core pair from recording coil	360/317	360/321	Ohsawa; Yuichi et al.
US 6256863 B1	20010710	Yoke type magnetoresistance head and manufacturing method of the same	29/603.08	148/108; 360/317	Saito; Kazuhiro et al.
US 6256171 B1	20010703	Thin film magnetic head having an improved heat dispersion and magnetic recording apparatus using the same	360/235.3	977/934	Yoda; Hiroaki et al.
US 6172858 B1	20010109	Thin film head	360/313	29/603.03	Yoda; Hiroaki et al.
US 6159593 A	20001212	Magnetoresistance effect element	428/811.2	257/E43.004; 324/252; 428/336; 428/900	Iwasaki; Hitoshi et al.
US 6157525	20001205	Magnetic head	360/324.12		Iwasaki;

A					Hitoshi et al.
US 6146776 A	20001114	Magneto-resistance effect head	428/811.3	324/252; 360/324.12; 428/900	Fukuzawa; Hideaki et al.
US 6118624 A	20000912	Magneto-resistance effect element having a magnetic biasing film	360/324.12	257/E43.004	Fukuzawa; Hideaki et al.
US 6118621 A	20000912	Magnetoresistance effect head having a pair of protrusions, steps or depressions between the detecting and nondetecting areas for improved off-track characteristics	360/327	360/322; 360/324.1	Ohsawa; Yuichi et al.
US 6111729 A	20000829	Magnetoresistance effect element	360/324.1		Kamiguchi; Yuzo et al.
US 6111722 A	20000829	Magnetoresistance effect element having improved biasing films, and magnetic head and magnetic recording device using the same	360/324.12	257/E43.004	Fukuzawa; Hideaki et al.
US 6088195 A	20000711	Magnetoresistance effect element	360/324.12	257/E43.004	Kamiguchi; Yuzo et al.
US 6069820 A	20000530	Spin dependent conduction device	365/171	257/E27.103; 257/E43.004; 365/173	Inomata; Koichiro et al.
US 6064552 A	20000516	Magnetoresistive head having magnetic yoke and giant magnetoresistive element such that a first electrode is formed on the giant magnetoresistive element which in turn is formed on the magnetic yoke which acts as a second electrode	360/322	360/321	Iwasaki; Hitoshi et al.
US 6052262	20000418	Magneto-resistance	360/324.12	257/E43.004	Kamiguchi;

A		effect element and magnetic head			Yuzo et al.
US 6046891 A	20000404	Thin film head	360/324.1		Yoda; Hiroaki et al.
US 6043515 A	20000328	Optical semiconductor device	257/103	257/81; 257/97; 257/99; 372/106; 372/45.01; 372/70; 372/75	Kamiguchi; Yuzo et al.
US 6038101 A	20000314	Magnetic head and method of manufacturing magnetic head	360/235.2		Yoda; Hiroaki et al.
US 5999378 A	19991207	Magnetoresistance effect head having a giant magnetoresistance effect film	360/324		Saito; Kazuhiro et al.
US 5991125 A	19991123	Magnetic head	360/324.12		Iwasaki; Hitoshi et al.
US 5962905 A	19991005	Magnetoresistive element	257/421	257/422; 257/423; 257/427; 257/E29.323; 257/E43.004; 257/E43.005	Kamiguchi; Yuzo et al.
US 5949622 A	19990907	Magnetoresistance effect element	360/324.12	257/E43.004	Kamiguchi; Yuzo et al.
US 5946167 A	19990831	Magnetoresistive sensor having lead and/or bias layer structure contributing to a narrow gap	360/322		Hara; Michiko et al.
US 5912790 A	19990615	Thin film magnetic recording-reproducing head having a high recording density and high fidelity	360/322	360/122; 360/317	Yoda; Hiroaki et al.
US 5905611 A	19990518	Thin film magnetic head responsive to spin-dependent	360/324.1		Yoda; Hiroaki et al.

		scattering			
US 5896251 A	19990420	Magnetoresistance effect head with conductor film pair and magnetic field proving film pair disposed between substrate and magnetoresistance effect film	360/324		Ohsawa; Yuichi et al.
US 5828525 A	19981027	Differential detection magnetoresistance head	360/314		Iwasaki; Hitoshi et al.
US 5818684 A	19981006	Shield type magnetoresistive head arranged for weakening of a galvano-current magnetic field	360/319		Iwasaki; Hitoshi et al.
US 5796560 A	19980818	Magnetoresistive head	360/324		Saito; Kazuhiro et al.
US 5780176 A	19980714	Magnetoresistance effect element	428/811.2	257/E43.004; 257/E43.005; 324/252; 360/324.11; 360/327.32; 428/610; 428/670; 428/675; 428/676; 428/678; 428/900	Iwasaki; Hitoshi et al.
US 5777542 A	19980707	Magnetoresistance effect device and manufacturing method thereof	338/32R	257/E43.004; 29/603.08; 360/320	Ohsawa; Yuichi et al.
US 5773156 A	19980630	Magnetoresistance effect element	428/611	257/E43.005; 338/32R; 360/324; 428/546; 428/620; 428/641	Inomata; Koichiro et al.
US 5768066 A	19980616	Magnetoresistive head having an antiferromagnetic	360/314		Akiyama; Junichi et al.

		layer interposed between first and second magnetoresistive elements			
US 5756191 A	19980526	Exchange coupling film and magnetoresistance effect element	428/209	257/E43.005; 324/252; 360/327.32; 428/688	Hashimoto; Susumu et al.
US 5738946 A	19980414	Magnetoresistance effect element	428/811.2	257/E43.004; 257/E43.005; 324/252; 360/324.1; 428/615; 428/652; 428/668; 428/670; 428/671; 428/900; 428/928	Iwasaki; Hitoshi et al.
US 5725963 A	19980310	Magnetoresistance effect element	428/811.2	257/E43.004; 257/E43.005; 324/252; 360/324.12; 428/622; 428/627; 428/629; 428/632; 428/639; 428/641; 428/660; 428/667; 428/670; 428/678; 428/900; 428/928	Iwasaki; Hitoshi et al.
US 5702832 A	19971230	Magnetoresistance effect element	428/611	257/E43.004; 257/E43.005; 324/252; 360/324.1; 428/622; 428/627; 428/629; 428/632; 428/639; 428/641;	Iwasaki; Hitoshi et al.

				428/660; 428/667; 428/670; 428/678; 428/811.2; 428/900; 428/928	
US 5700588 A	19971223	Magnetoresistance effect element	428/611	257/E43.005; 428/635; 428/670; 428/673; 428/675; 428/928	Saito; Yoshiaki et al.
US 5698335 A	19971216	Magnetoresistance effect element having bias films	428/611	257/E43.004; 257/E43.005; 324/252; 360/324.1; 428/622; 428/627; 428/629; 428/632; 428/639; 428/641; 428/660; 428/667; 428/670; 428/678; 428/811.2; 428/900	Iwasaki; Hitoshi et al.
US 5688605 A	19971118	Magnetoresistance effect element	428/811.2	257/E43.004; 257/E43.005; 324/252; 360/324.1; 428/622; 428/668; 428/671; 428/672; 428/673; 428/674; 428/675; 428/928	Iwasaki; Hitoshi et al.
US 5616370 A	19970401	Artificial multilayer and method of manufacturing the same	427/547	204/192.2; 257/E43.005; 427/128; 427/130; 427/131;	Okuno; Shiho et al.

				427/598	
US 5607781 A	19970304	Oxide film with preferred crystal orientation, method of manufacturing the same, and magneto-optical recording medium	428/822.1	204/192.1; 204/192.11; 204/192.14; 204/192.15; 204/192.2; 204/192.26; 252/62.51C; 252/62.51R; 252/62.56; 369/13.35; 427/128; 427/595; 427/599; 428/702; 428/900	Okuno; Shiho et al.
US 5587026 A	19961224	Ferromagnetic film	148/313	420/435	Iwasaki; Hitoshi et al.
US 5585199 A	19961217	Magnetoresistance effect head	428/621	360/324; 428/611; 428/928	Kamiguchi; Yuzo et al.
US 5585196 A	19961217	Magnetoresistance effect element	428/811.3	257/E43.005; 360/126; 360/324; 428/336; 428/402; 428/558; 428/561; 428/611; 428/615; 428/671; 428/675; 428/900	Inomata; Koichiro et al.
US 5578385 A	19961126	Magnetoresistance effect element	428/611	257/E43.005; 428/635; 428/670; 428/673; 428/675; 428/928	Saito; Yoshiaki et al.
US 5576915 A	19961119	Magnetoresistive head with antiferromagnetic sublayers interposed between first and second spin-valve	360/314		Akiyama; Junichi et al.

		units to exchange bias inner magnetic films thereof			
US 5552949 A	19960903	Magnetoresistance effect element with improved antiferromagnetic layer	360/327.32	257/E43.004; 324/252; 338/32R	Hashimoto; Susumu et al.
US 5549978 A	19960827	Magnetoresistance effect element	428/811.2	257/E43.004; 257/E43.005; 324/252; 360/324.1; 428/611; 428/622; 428/627; 428/629; 428/632; 428/639; 428/641; 428/660; 428/667; 428/670; 428/678; 428/900	Iwasaki; Hitoshi et al.
US 5534355 A	19960709	Artificial multilayer and method of manufacturing the same	428/811.3	257/E43.005; 324/252; 360/126; 360/324; 427/131; 427/547; 427/598; 428/212; 428/336; 428/635; 428/662; 428/667; 428/668; 428/672; 428/674; 428/680; 428/681; 428/900; 428/928	Okuno; Shiho et al.
US 5523172 A	19960604	Magnetoresistance effect element	428/611	257/E43.005; 428/635; 428/670;	Saito; Yoshiaki et al.

				428/673; 428/675; 428/928	
US 5500633 A	19960319	Magnetoresistance effect element	338/32R	257/E43.005; 324/252	Saito; Yoshiaki et al.
US 5493465 A	19960220	Magnetoresistance effect element and magnetic recording apparatus	360/324.1	257/E43.004; 324/207.21; 338/32R	Kamiguchi; Yuzo et al.
US 5484491 A	19960116	Ferromagnetic film	148/313	420/435	Iwasaki; Hitoshi et al.
US 5461527 A	19951024	Magneto-resistive head	360/327.32		Akiyama; Junichi et al.
US 5416353 A	19950516	Netoresistance effect element	257/421	257/425; 257/427; 257/536; 257/E43.004	Kamiguchi; Yuzo et al.
US 5365212 A	19941115	Magnetoresistance effect element	338/32R	257/E43.005; 324/252	Saito; Yoshiaki et al.
US 5329413 A	19940712	Magnetoresistance sensor magnetically coupled with high- coercive force film at two end regions	360/327.32		Kondoh; Reiko et al.
US 5304975 A	19940419	Magnetoresistance effect element and magnetoresistance effect sensor	338/32R	257/E43.005; 324/252; 360/324	Saito; Yoshiaki et al.